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① Business Method ID nlu Ann's



Disclosure YOR8-2000-0738

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Required fields are marked with the asterisk (*) and must be filled in to complete the form.

Summary

Status	Under Evaluation
Processing Location	YOR
Functional Area	900 Goyal-Systems & Software
Attorney/Patent Professional	David Shofi/Watson/IBM
IDT Team	David Shofi/Watson/IBM
Submitted Date	08/28/2000 05:35:47 PM
Owning Division	RES
PVT Score	To calculate a PVT score, use the 'Calculate PVT' button.
Incentive Program	
Lab	
Technology Code	

Inventors with Lotus Notes IDs

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Inventors without Lotus Notes IDs

IDT Selection

IDT Team: David Shofi/Watson/IBM	Attorney/Patent Professional: David Shofi/Watson/IBM
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Response Due to IP&L : 09/28/2000

Main Idea

Title of disclosure (In English)

Method and apparatus for independent filtering of e-Commerce transactions

Idea of disclosure

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of

Exhibit A

using the invention.

The problem: E-Commerce systems typically have a policy for allowing transactions to proceed to completion. This policy may either be static (in that it is hard wired into the system) or dynamic in that it can be updated without redeploying the application. In either case, policies must be compatible with the deployed e-commerce system they are associated with. Frequently, there will be transactions that are allowed by the system even though the system operator/owner would not approve.

The solution: This invention provides a method for enforcing additional constraints, thereby allowing the system owner/operator to extend the functionality of the system without the knowledge or assistance of the original system provider. It provides a generic means for blocking or modifying in-progress e-commerce transactions by intercepting, examining and possibly modifying one or more of the messages that constitute the transaction. The generic solution described here has several advantages over the classic integrated approach.

- Uniform policy across different e-Commerce systems.
- Ability to update the policy with arbitrary new code without re-deploying the e-Commerce systems
- Ability to insert custom and proprietary filters without the knowledge or participation of the e-Commerce system vendor.
 - For instance, enforce policy such as usage of a preferred supplier for airline ticket purchases.
 - Implement a custom approval/audit policy that is consistent across e-commerce systems.
- Ability to block certain transactions that you do not wish to be active on your systems.
- Masquerade the transaction so as to hide some source information from the vendor fulfilling an order. For instance, suppose a company employee wishes to electronically purchase software that is downloaded electronically. Masquerading could hide all information about the specific employee from the vendor while allowing the transaction to complete.

In addition, this solution is well suited to providing protection against the following risks that are inherent in any e-Commerce environment;

- Users may intentionally attempt to perform transactions that are allowed by the e-Commerce system but of which his employer would not approve.
- Users may accidentally attempt to perform transactions that are allowed by the e-Commerce system but which they did not intend.
- Unauthorized programs may attempt to perform transactions order under the auspices of a valid user.
- Unauthorized users may attempt to use the system.
- Legitimate programs may have undesired behavior that should be blocked.

2. How does the invention solve the problem or achieve an advantage,(a description of "the invention", including figures inline as appropriate)?

One embodiment of this invention would be software that inserts itself between all applications and the networking layer that is used to transport e-commerce traffic. This software would examine messages that pass through it and selects messages that are part of standard e-commerce transactions. The software would then examine them and analyze them for specific characteristics. If the analysis results so indicate, the message could be blocked or modified in a way that will enforce the policy that applies to the analysis results. The software could also take additional actions such as alerting, directly querying the user, logging results, etc.

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

Current solutions for policy enforcement are included as integral parts of an overall e-commerce offering. This solution offers a generic method to add enhanced filtering to e-commerce systems that are already deployed. Since this system could potentially cover all the installed e-commerce systems at a site there would be additional advantage in updating the system in real time.

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

Distinguishing factors:

Installed as an **add-on** that can work with standards based e-commerce which we expect to be ubiquitous in the future. There are currently no products like this and we have not heard such products discussed.

Policy can be applied across e-commerce offerings

- Separates the e-commerce policy vendor from the e-commerce function vendor thus defining a new business category which we hope to be able to describe as a business methods patent.

Random points:

- Redacted
- Redacted
- Redacted
- Redacted

A possible start for claims:

(incorporate concept of policy) and one or more policies

1. A subsystem interposed between two or more parties that intercepts e-commerce transactions and takes actions based upon the properties of the e-commerce transaction, where the presence of the subsystem does not require any changes to the protocols used by the parties.
2. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that identifies e-commerce transaction related traffic even when other traffic is passing between the parties.
3. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that deduces what if any action should be taken in connection with an e-commerce transaction arriving at the subsystem.
 1. A system as in claim (3) where the action is deduced in part or whole by applying predefined rules to the contents of one or more messages that comprise an e-commerce transaction.
 2. A system as in claim (3) where the action is deduced in part or whole by applying predefined rules independent of the contents of any messages that comprise an e-commerce transaction.
 3. A system as in claim (3) where the action is deduced by applying predefined rules based entirely on the origin or destination of one or more messages that comprise an e-commerce transaction
 4. A system as in claim (3) where the action is deduced by supplying another software subsystem information and receiving a reply.
 5. A system as in claim (3) where the action is deduced by interacting with a human
4. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that modifies e-commerce transactions arriving at the subsystem before it is passed to the intended party.
5. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that does not pass a received message to the intended party.
6. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that pass a received message to a different party than the intended party.
7. A system as in claim (1) where the subsystem interposed between two or more parties includes one or more software components that pass a received and modified message to a different party than the intended party.
8. A system as in claim (1) where interposed is interpreted to mean that the subsystem is comprised in part or entirely of a software layer inserted between two existing software layers such that the

- preexisting software layers continue to operate properly in the event the subsystem takes no action.
9. A system as in claim (1) where interposed is interpreted to mean that the subsystem is comprised in part or entirely of a software object inserted between two existing software objects such that the preexisting software objects continue to operate properly in the event the subsystem takes no action.
 10. A system as in claim (1) where interposed is interpreted to mean that the subsystem is comprised in part or entirely of a software component inserted between two existing software components such that the preexisting software components continue to operate properly in the event the subsystem takes no action.
 11. A system as in claim (1) where parties is interpreted to mean any software that represents a person or institution that has the ability to transfer goods, services or money.
 12. A system as in claim (1) where parties is interpreted to mean any software that represents a person or institution that has the ability to transfer goods, services or money.
 13. A system as in claim (1) where *e-commerce transaction* is interpreted to mean any message traveling between any of the parties related to the transfer of goods, services or money.
 14. A system as in claim (1) where *e-commerce transaction* is interpreted to mean any collection of messages traveling between any of the parties that together enable the transfer of goods, services of money.

***Critical Questions (Questions 1 - 7 must be answered)**

***Question 1**

On what date was the invention workable? 08/01/2000 **Please format the date as MM/DD/YYYY**
(Workable means i.e. when you know that your design will solve the problem)

***Question 2**

Is there any planned or actual publication or disclosure of your invention to anyone outside IBM?

☐ Yes
☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

Are you aware of any publications, products or patents that relate to this invention?

☐ Yes
☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

***Question 3**

Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal?

☐ Yes
☒ No

Is a sale, use in manufacturing, product announcement, or proposal planned?

☐ Yes
☒ No

If Yes, Identify the product if known and indicate the date or planned date of sale, announcements, or proposal and to whom the sale, announcement or proposal has been or will be made.

Product:

Version/Release:

Code Name:

Date:

To Whom:

If more than one, use cut and paste and append as necessary in the field provided.

***Question 4**

Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMers?

☐ Yes
☒ No

If yes, give a date. **Please format the date as MM/DD/YYYY**

Question 5	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you ever discussed your invention with others not employed at IBM?	
If yes, identify individuals and date discussed. Fill in the text area with the following information, the names of the individuals, the employer, date discussed, under CDA, and CDA #.	

Question 6	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Not sure
Was the invention, in any way, started or developed under a government contract or project?	
If Yes, enter the contract number	

Question 7	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Not Sure
Was the invention made in the course of any alliance, joint development or other contract activities?	
If Yes, enter the following: Name of Alliance, Contractor or Joint Developer	
Contract ID number	
Relationship contact name	
Relationship contact E-mail	
Relationship contact phone	

Question 8	<input type="radio"/> Yes <input checked="" type="radio"/> No
Have you submitted, or are you aware of, any related disclosure submission?	
If Yes, please provide the title and docket or disclosure number below:	

Question 9
What type of companies do you expect to compete with inventions of this type? <i>Check all that apply.</i>
<div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">Redacted</div> <div> <input type="checkbox"/> Manufacturers of enterprise servers <input type="checkbox"/> Manufacturers of entry servers <input type="checkbox"/> Manufacturers of workstations <input type="checkbox"/> Manufacturers of PC's <input type="checkbox"/> Non-computer manufacturers <input type="checkbox"/> Developers of operating systems <input type="checkbox"/> Developers of networking software <input type="checkbox"/> Developers of application software <input type="checkbox"/> Integrated solution providers <input type="checkbox"/> Service providers <input type="checkbox"/> Other (Please specify below) </div> </div>

Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the evaluation)

(The Patent Value tool can be used by you or the evaluation team to determine the potential licensing value of your invention.)

The Patent Value Tool has not yet been used to calculate a score.

Patent Disclosure Text & Drawings

Enter any additional information relating to this disclosure below:

(Form Revised 12/17/97)